

‘We Like You, But We Don’t Want You’—The Impact of Pregnancy in the Workplace

Barbara Masser · Kirsten Grass · Michelle Nesic

Published online: 9 September 2007
© Springer Science + Business Media, LLC 2007

Abstract This study considered whether pregnant women are considered as mothers (to be) in the workplace. Working from the stereotype content model (SCM) we predicted that pregnant women would be stereotyped as warm and incompetent, and experience workplace discrimination; with these effects accentuated in masculine-type occupations. Eighty-two Australian University undergraduates evaluated a candidate who was pregnant or not for a masculine- or feminine-type short-term position. Results provided mixed support for the SCM. Across both occupations, the pregnant candidate was rated as warmer, more competent, but was discriminated against in comparison to the non-pregnant candidate. We suggest that participants may employ a shifting standard of comparison, thus highlighting a potential limitation of the usefulness of traditional SCM measures with individual targets.

Keywords Pregnancy · Prejudice · Discrimination · Stereotype content model

Introduction

An emerging literature now suggests that women suffer additional disadvantages in the workplace when they provide evidence of being a mother (e.g., Cuddy et al. 2004; Ridgeway and Correll 2004). Working from their stereotype content model (SCM), Cuddy et al. (2004) suggest that

women, unlike men, trade perceived competence for warmth when they become parents. This is associated with less interest in hiring, promoting and educating working mothers; an effect that may be accentuated in ‘masculine-type’ positions (Fuegen et al. 2004). A parallel literature has also suggested that pregnant women are discriminated against in the workplace (e.g., Butensky 1984 cited in Bragger et al. 2002; Gueutal and Taylor 1991). Working from a SCM perspective, the aim of the current study was to consider whether discrimination against working mothers begins before they give birth, and whether this effect is accentuated in masculine-type positions. This research is important because the retention of women in paid employment, and especially in traditionally male domains, has been highlighted internationally to be of social and economic importance (Human Rights and Equal Opportunities Commission 2007). At the individual level, the decision of whether or when to return to work after having a child has been demonstrated to be impacted upon by the employee’s experience in the workplace whilst pregnant (Houston and Marks 2003). Drawing on the SCM, and in line with Cuddy et al. (2004), we expected that a pregnant candidate would be rated as less competent but warmer than a non-pregnant female candidate. In addition, we predicted that pregnancy would be associated with discrimination—specifically, that the pregnant candidate would be less likely to be recommended for hiring and would be recommended for a lower starting salary than a non-pregnant applicant. In line with the suggestion of Fuegen et al. (2004), we expected that these effects would be moderated by gender-type of the position being applied for. Specifically, we expected that evaluations of, and discrimination against, the pregnant candidate would be more extreme when she was applying for a masculine- (vs a feminine-) type position.

B. Masser (✉) · K. Grass · M. Nesic
School of Psychology, University of Queensland,
St Lucia, Queensland 4072, Australia
e-mail: B.Masser@psy.uq.edu.au

Discrimination Against Working Mothers

Over the last decade there has been increasing recognition within the social science literature that the prejudice and discrimination experienced in the workplace is not equal for all women. Within the social work and economics literatures, evidence for discrimination has been found when the comparative pay of mothers has been considered. Specifically, a number of authors (e.g., Blau and Kahn 2000; Crittenden 2001; Waldfogel 1998) have documented the rise of the family, or rather, maternal pay gap. This is defined as a gap between the wages of ‘mothers and others’ (Crittenden 2001) attributable to the presence of dependent children, which persists even when differences in education, experience and work patterns (e.g., part-time vs full-time) are accounted for (Waldfogel 1997, 1998). Evidence of the maternal pay gap has been found in many countries including the USA, the UK (Harkness and Waldfogel 1999) and Australia (Breusch and Gray 2004; cf. Baxter 1992).

In accounting for the maternal pay gap, Waldfogel (1998) notes that some (e.g. Becker 1985, 1991) have attempted to explain the discrepancy in pay with reference to the (comparatively) lower motivation and effort of mothers in the workforce. Analyses by Waldfogel (1998; 1997) and others (e.g., Korenman and Neumark 1992) suggest that accounts based on motivation and effort alone cannot account for the consistently observed pay gap. One possibility is that the beliefs or stereotypes emanating from perceptions of mothers as less motivated may account for people’s willingness to discriminate against them in the workplace (Crosby et al. 2004; Cuddy et al. 2004; Fuegen et al. 2004; Ridgeway and Correll 2004). In short, because working mothers are viewed as contributing less at work than others, the lower reward of working mothers vis-à-vis other workers may be seen as legitimate.

Is She a Professional or a Mother?—The Stereotype Content Model and Perceptions of Working Mothers

In a recent analysis of stereotype content, Fiske et al. (2002) suggested that prejudice and discrimination may not emanate solely from antipathy towards a group or their members. Rather, in their stereotype content model (SCM) they proposed that prejudice and discrimination are underpinned by perceptions of (relative) status and interdependency which results in evaluations on the two key dimensions of warmth and competency (see also Judd et al. 2005). Unlike traditional models of prejudice (Allport 1954), which suggest that discrimination results from a combination of both dislike and disrespect, Fiske et al. (2002) propose that the presence of either dislike or disrespect may be sufficient to provoke discrimination towards outgroup members.

In a preliminary examination of this idea, Fiske et al. (2002) conducted a series of studies and found support for the centrality of the dimensions of competence and warmth to stereotype content, whilst also documenting the relationship of status to perceived competence and competition to perceived (lack of) warmth. In addition, the presence of negative evaluations on either one of the dimensions was sufficient to provoke intergroup affect. Those groups evaluated as incompetent but warm (e.g., housewives; Cuddy et al. 2004) were characteristically viewed as being low in status and as being uncompetitive, eliciting paternalistically motivated pity or sympathy. In contrast, those groups evaluated as competent but as lacking in warmth (e.g., female professionals) tended to be high status groups viewed as competitive. Typically, such ‘threatening’ groups elicited emotions of envy and jealousy.

In an extension of the work of Fiske et al. (2002), Cuddy et al. (2007) considered the impact of warmth and competency stereotypes on (discriminatory) behavioral tendencies. Working from the relationship between warmth and competency and the distinct intergroup emotions elicited from cross cutting these two dimensions, Cuddy et al. (2007) proposed that discriminatory behaviors could be differentiated on the basis of two dimensions—the active-passive dimension and the facilitation-harm dimension. As such, Cuddy et al. (2007) theorised that classification into one of the four warmth–competency quadrants would result in specific behavioral tendencies. They proposed and found, over a series of three studies, that those groups characterised as warm but incompetent tended to elicit active facilitation (e.g., helping and protective behaviors) and passive harm (e.g., failure to hire). In contrast, for those low in warmth, but high in competency, behavior was characterised by passive facilitation (e.g., “uniting with” behaviors; Cuddy et al. 2007, p. 633) and active harm (e.g., harassment, bullying).

In considering the issue of working mothers, Cuddy et al. (2004) noted that working mothers potentially have dual category membership. Theoretically, mothers who work can either be viewed primarily as female professionals who are competent but cold (with ensuing behavioral consequences), or as mothers/housewives who are warm but incompetent with behavioral consequences in terms of being helped and protected but still discriminated against in a passive manner. Drawing on previous research, which suggested that the categorization of mother would dominate over other possible categorizations (e.g., professional) either through cultural dominance of that view of women (Deutsch and Saxon 1998), or through that category’s perceived relevance in the workplace (because of its incompatibility with the ideal worker stereotype; Ridgeway and Correll 2004), Cuddy et al. (2004) asked a sample of University students to evaluate working mothers (along with childless working women and men and working fathers). Specifically, participants were

asked to read a profile of a consultant who was either male or female and who either did or did not have a child and rate that consultant on a series of traits (assessing perceived warmth and competency). Participants then answered a series of discrimination proxy items pertaining to decisions surrounding the hiring, training and promotion of that consultant.

Consistent with the view of working mothers as more ‘mothers than others’, Cuddy et al. (2004) found that in terms of intergroup comparisons the working mother gained in warmth but lost in competence relative to the childless working woman. This latter effect, however was marginal at $p=.08$ (Cuddy et al. 2004, p. 709). In accordance with this and the behavioral tendencies framework proposed by Cuddy et al. (2007), the working mother was passively discriminated against in term of being preferred less (in terms of hiring, training or promoting) than the childless woman. Correlational analyses across conditions indicated that controlling for warmth, perceived competency was related to greater preference for the candidate, whereas warmth, once competency was controlled for, was unrelated to discrimination towards, or preference for, the candidate.

The research study of Cuddy et al. (2004) therefore indicates that, consistent with the suggestion emanating from the broad social science literature (e.g., Waldfogel 1998), the workplace performance of mothers is not evaluated in the same way as that of other workers. Because of the primacy of the categorization of ‘mother’, these women are viewed as warm but incompetent, and it is this evaluation which leads to (or at least justifies) discrimination against them. Ridgeway and Correll (2004) proposed that this perceived ‘mismatch’ between motherhood and working may be greater in roles defined by a stereotypically male working pattern and emphasis.

When Birth is Irrelevant—Evaluations of Pregnant Women in the Workplace

One suggestion that has emerged from the literature surrounding evaluations of working mothers is that the actual birth of a child may be largely irrelevant to others’ perceptions and evaluations of the female employee. Drawing on a body of literature that had considered the impact of pregnancy in the workplace (e.g., Bragger et al. 2002; Gueutal and Taylor 1991; Halpert et al. 1993), Fuegen et al. (2004) suggested that the discrimination evidenced in relation to working mothers could begin before the birth of the child; that is pregnancy may be sufficient to make the category of mother, with its associated negative workplace effects, dominant over other potential categorizations such as professional.

Discrimination against pregnant women has been demonstrated both in legal cases and in the laboratory. In Australia, as in many countries (e.g., UK), it is unlawful to discriminate

against employees on the grounds of pregnancy or potential pregnancy (Sex Discrimination Act 1984). Despite this, in 1999, over 17% of all complaints accepted under the Sex Discrimination Act centred on pregnancy as a cause of discrimination. These complaints typically focused on issues surrounding negative attitudes towards pregnancy/pregnant women, demotions and unfair dismissal. Parallels between the USA and Australia with regard to social policies and cultural attitudes to female participation in the paid workforce (e.g., Drago et al. 2001; Whitehouse 2004) have often been drawn. Congruent with this, discrimination against pregnant women evidenced in the Australian legal cases has also been documented in empirical research in the USA.

Halpert et al. (1993) asked US undergraduate students to evaluate either a pregnant or non-pregnant woman who was completing an assessment centre exercise. Despite the fact that the performances observed were identical, the pregnant woman was stereotyped more negatively and discriminated against in comparison to her non-pregnant colleague. These results were evaluated as being consistent with those of Butensky (1984 cited in Bragger et al. 2002) who found that pregnancy impacted on evaluations of the competency of a female worker.

In accounting for discrimination against pregnant women, Bragger et al. (2002) suggested that bias against pregnant employees may stem from many possible sources, including employer concern about the impact of an extended period of leave. In line with recent research on working mothers, Bragger et al. (2002) also suggested bias against pregnant women may result from pregnancy increasing the salience of stereotypical traits associated with ‘traditional’ characterisations of women (e.g., homemaker; Six and Eckes 1991). Consistent with the SCM (Fiske et al. 2002), Bragger et al. (2002) proposed that pregnant women may be subject to exaggerated gender stereotypes in that they are viewed as possessing more traditionally feminine traits (e.g., empathy, nurturing) than non-pregnant female employees. As such, pregnant women may be more likely viewed as lacking the stereotypically masculine agentic or competence related traits commonly thought to be of importance in the workplace. Bragger et al. (2002) noted, however, that the importance of these salient gender stereotypes in predicting discrimination against a pregnant employee may be moderated by the perceived gender type of the organizational role. Specifically, bias may only be exhibited against a pregnant employee when she is considered in relation to a position requiring (predominately) agentic traits.

In an examination of bias against pregnant employees, Bragger et al. (2002) asked participants to view a videotape of either a pregnant or not pregnant female employee who was participating in either an unstructured or structured interview. Participants were informed that the employee was applying for either a teaching position in a high school

(a job proposed by the authors as feminine) or an insurance sales agent position (a job proposed by the authors as masculine), and were asked to indicate their hiring and salary recommendations. Analyses indicated that when subjected to an unstructured interview, participants were significantly less likely to recommend hiring of the pregnant candidate. However, contrary to predictions, this effect was not accentuated in the masculine job condition. Whilst this may be attributable to the fact that the job types were not tested to verify their masculine and feminine classification or that the two positions came from very different industries, Bragger et al. (2002) accounted for this in terms of work–family balance issues. Specifically, they suggested that much of the bias that exists against pregnant candidates may stem from their anticipated leave and issues surrounding their (future) work–family balance, rather than from stereotypical evaluations of them as ‘traditional’ women.

Pregnant Employees—(Working) Mothers in Waiting?

Whilst discrimination against pregnant employees has been well documented (e.g., Bragger et al. 2002; Halpert et al. 1993; c.f. Gueutal and Taylor 1991), little is known about what underpins this discrimination. One suggestion from the SCM (Fiske et al. 2002) and the work of Cuddy et al. (2004) is that pregnant women may suffer the same evaluative consequences as working mothers. Consistent with the account of Bragger et al. (2002), pregnant employees may be primarily categorised as mothers and thus judged as warm but incompetent workers. In turn, they may suffer from passive forms of harm in the workplace, such as a failure to be hired or adequately compensated (Cuddy et al. 2007). Drawing on the suggestions of Bragger et al. (2002) and Ridgeway and Correll (2004), the incompatibility of ‘a mother (to be)’ with work may be accentuated in a masculine-typed position (in comparison to a feminine-typed position).

In this study, working from the SCM (Fiske et al. 2002), we examined whether a pregnant employee would be evaluated more in line with the ‘working mother’ (Cuddy et al. 2004) stereotype, with ensuing consequences in terms of discrimination, vis-à-vis a non-pregnant employee and whether this effect would be accentuated when the candidate was applying for a masculine- (vs feminine-) type position. In order to eliminate the potential confound of anticipated leave and work/life balance issues in the design (cf. Bragger et al. 2002), participants were asked to consider the application materials of either a pregnant or non-pregnant female applicant for a short-term three month temporary transfer (a secondment) to either a feminine- or masculine-typed position. Participants indicated the degree to which a series

of traits were descriptive of the candidate, the perceived employability of the candidate in the position and an appropriate starting salary. Drawing on previous SCM research focusing on working mothers (e.g., Cuddy et al. 2004), previous literature focusing on pregnancy in the workplace (e.g., Bragger et al. 2002), and literature suggesting the accentuation of stereotyping effects in masculine-typed (vs feminine-typed positions; e.g., Bragger et al. 2002; Ridgeway and Correll 2004) the central hypotheses were:

- 1a. The pregnant candidate would be evaluated as warmer and less competent than the non-pregnant candidate.
- 1b. These effects of pregnancy on warmth and competence ratings would be accentuated when the candidates had applied for a masculine-typed position in comparison to when they had applied for a feminine-type position.
2. The ratings of the candidates’ competency would be positively associated with hiring recommendations, whereas warmth ratings would be not be associated with these decisions.
- 3a. The pregnant candidate would be recommended for a lower starting salary and would be less likely to be recommended for hiring than the non-pregnant candidate.
- 3b. These effects of pregnancy on salary and hiring recommendations would be accentuated when the candidates had applied for a masculine-typed position in comparison to when they had applied for a feminine-type position.

Pretesting

Job Types

In order to select the masculine and feminine job-types for use in the main study, pretesting was undertaken with 23 participants (15 women, 8 men) drawn from the same population as those sampled in the main study. The mean age of the sample for the pretest was 19.91 years ($SD=4.96$). In this pretest participants were asked to rate the femininity (1=*not at all* to 7=*extremely*) and masculinity (1=*not at all* to 7=*extremely*) of 16 occupations from eight employment areas (e.g., banking, law, education). The occupations of newspaper journalist and newspaper editor were selected for use in the main study on the basis of being viewed as most different from one another in terms of masculinity (Journalist $M=3.91$, $SD=.85$; Editor $M=5.11$, $SD=1.11$, $t(22)=-3.78$, $p<.01$) and femininity (Journalist $M=4.61$, $SD=1.16$; Editor $M=3.09$, $SD=1.38$, $t(22)=4.95$, $p<.001$). In addition, both occupations had mean masculinity and femininity scores which differed significantly from the midpoint of the relevant scale (Journalist, $t(22)=2.52$, $p<.03$; Editor, $t(22)=5.05$, $p<.001$).

Pregnancy Manipulation

A further pretest was undertaken to ensure that the candidate's pregnancy was a salient feature in the photographs to be used in the main study. Ten participants (five women, five men) with a mean age of 19.69 years ($SD=4.71$) drawn from the same population as those sampled in the main study viewed one of two photographs of the same women. This woman was either depicted to be in the early stages of pregnancy (3–4 months) or not to be pregnant. The woman's clothes, expression and stance within the photograph were kept constant across the two conditions. Participants were asked to note down five words describing the most prominent characteristic of the person in the picture. All those who viewed the photograph of the pregnant woman listed her pregnancy as a prominent physical feature. None of the participants in the non-pregnant condition noted pregnancy as a prominent physical feature.

Method

Participants and Procedure

Eighty-two students (57 women, 24 men, 1 unspecified) from a large University in the southeast of Queensland completed the measures for partial course credit. The mean age of the sample was 19.88 years ($SD=3.04$), and all participants had English as a first language or were proficient in English. Participants read the materials of the study and then answered the questions about the candidate.

Materials

Employee Folder

Participants were presented with a single employee folder that they were told had been submitted in relation to an appraisal for a temporary (3 month) secondment—either as a newspaper journalist (feminine job-type) or as a newspaper editor (masculine job-type). Attached to the inner side front cover of the employee folder was a sheet of paper where participants were instructed that they could make notes whilst reading the folder contents to assist them with their task of evaluating the candidate. The main section of the employee folder included a picture of the employee, a job application coversheet, curriculum vitae, reference from a previous employer, employee medical file update sheet and a description of the position that the candidate should be evaluated for. The picture of the employee showed a body shot of the employee in which she was either visibly in the early stages of pregnancy (3–4 months; pregnancy condition) or was not

visibly pregnant (no pregnancy condition). The same actor posed for both pictures and thus all other features of the individual (e.g., hair colour, perceived attractiveness etc.) remained constant between conditions. The job application cover sheet detailed the position the candidate was currently employed in and the curriculum vitae and reference from the previous employer established the applicant's suitability for that position at the time of appointment. The medical file update detailed the demographic, insurance, vaccination and allergy details of the employee. In addition, the employee's recent medical history was given. In the case of the pregnant candidate, a note on the file indicated that the candidate had notified her employers of her pregnancy and a due date, 6 months in the future, was given. As most women in Australia work comparatively late into their pregnancies (33–35 weeks; Buttrose and Adams 2005) this due date was chosen in order to highlight the pregnant candidate's ability to fulfil the temporary role for which she was being considered. For the non-pregnant candidate, no mention of pregnancy was made on the medical file.

The final document included in the employee folder was a description of the position that the candidate should be evaluated for. In all cases, this was a temporary position (of three months duration) with an almost immediate start-date. Those in the feminine job-type position received details of the 'newspaper journalist' position, which specified the goals of the employing organization, the work related traits desirable in an employee in this position, along with other position details such as salary and hours of work. Those in the masculine job-type condition received details of a newspaper editor position. The position description for this job was identical to that of the newspaper journalist position with the exception that the candidate was required to have 'excellent leadership qualities'.

Measures

After reading the employee folder, participants were asked to answer a number of questions about their perception of the candidate and the candidate's suitability for the position.

Trait Descriptions

Participants were asked to rate the candidate on 16 traits using 1 (*not at all*) to 7 (*extremely*) scales. Four of the traits measured competence-related traits (competent, assertive, ambitious, confident) and four measured warmth-related traits (warm, kind, sensitive, helpful). The remaining eight were filler traits (e.g., thoughtful, tactful). The scale items were taken from those used in earlier research considering stereotype content (e.g., Conway et al. 1996; Cuddy et al. 2004; Fiske et al. 2002).

Salary Recommendation

Participants were asked to make a recommendation regarding the comparative salary that the candidate should receive in the position if she were appointed. With regard to the monthly salary, participants were asked to indicate whether the candidate should receive *\$800 less than the predecessor* (–2), *\$400 less* (–1), *the same salary as the predecessor* (0), *\$400 more than the predecessor* (1) or *\$800 more* (2).

Hiring Recommendation

Participants were asked to indicate the hiring recommendation likely by the organization on the basis of the information provided to them by the participant. The items assessing this were: ‘how likely is it that the candidate would not be hired by employers of this organization?’ (reverse scored), ‘how likely is it that the current applicant would be hired for this job?’ and ‘how likely is it that others would hire the applicant for the job?’. Participants responded on 1 (not at all likely) to 7 (extremely likely) scales.

Results

Preliminary Analyses

Principal-component analyses with a varimax rotation were used to assess the structure of the measures. The four traits assessing the competence of the candidate loaded on one interpretable component (loadings ranged from .73 to .81). Responses across these items were averaged and a single composite measure of competency-related traits was created (Cronbach’s $\alpha=.76$), with higher scores corresponding to greater perceived competency. The four traits assessing the warmth of the candidate loaded on one interpretable component (loadings ranged from .67 to .82). Responses across these items were averaged and a single composite measure of warmth-related traits was created (Cronbach’s $\alpha=.77$), with higher scores corresponding to greater perceived warmth. Finally, the three items assessing the perceived hireability of the candidate loaded onto one interpretable factor (loadings ranged from .64 to .93). Following recoding, responses across these items were averaged and a single composite measure of hireability was created (Cronbach’s $\alpha=.74$), with higher scores corresponding to greater perceived hireability. Visual inspection of the notes made by participants to aid them in their task of evaluating the candidate indicated that all participants in the pregnancy condition accurately noted the pregnancy of the candidate. In addition all participants correctly noted the temporary position being applied for (either journalist or newspaper editor).

Main Analyses

Preliminary checks conducted through analysis of covariance (ANCOVA) indicated that participant gender was not a significant covariate for any of the dependent variables (all $p>.15$), and the inclusion of this factor as a covariate did not significantly alter the pattern of findings obtained for any of the dependent measures. Therefore participant gender was not considered further in the analyses. Thus, in order to assess the impact of pregnancy and work position applied for on the dependent measures, a series of analyses of variance (ANOVAs) were conducted.

Hypotheses 1a and 1b: Competency and Warmth Trait Evaluations

The analysis of the competency trait measure yielded a significant main effect of pregnancy condition, $F(1, 78)=4.54, p<.05$, with the pregnant candidate being rated more positively on the competency traits ($M=5.88, SD=.67$) than the non-pregnant candidate ($M=5.50, SD=.75$). No other main effects or interactions were significant (all $p>.14$).

Analysis of the warmth trait measure yielded a significant main effect of pregnancy condition, $F(1, 76)=3.87, p=.05$, with the pregnant candidate being rated more positively on the warmth traits ($M=4.75, SD=.66$) than the non-pregnant candidate ($M=4.46, SD=.64$). No other main effects or interactions were significant (all $p>.72$).

In order to check that the effects obtained on the competency and warmth traits were not simply a function of a positive bias towards the pregnant candidate, analyses of the filler traits included in the study were undertaken. These analyses indicated no significant main effects for pregnancy condition or work position applied for. In addition none of the interaction terms between pregnancy condition and work position applied for were significant (all $p>.12$).

Hypothesis 2: The Relationship Between Stereotypes and the Discrimination Proxy Items

Correlational analyses were performed to examine whether, in line with Cuddy et al. (2004), warmth and competency ratings predicted the hiring recommendation of the candidates. Warmth and competency were positively correlated ($r=.39, p<.001$) and as such Pearson and partial correlations are reported. For the non-pregnant candidate, competence strongly predicted a hiring recommendation ($r=.46, p<.01$)—a correlation that strengthened when controlling for warmth ($r=.51, p<.001$). In contrast, for the pregnant candidate, competency was non-significantly negatively related to a hiring recommendation ($r=-.04, ns$; partial $r=-.17, ns$). Further analyses indicated that the correlations

between competency and hiring recommendations significantly differed depending on the pregnancy status of the candidate ($z=-2.34$, $p<.05$; partial $z=-2.96$, $p<.05$). Warmth was unrelated to hiring recommendations for either the non-pregnant candidate ($r=.12$, *ns*; partial r controlling for competence $=-.08$, *ns*) or the pregnant candidate ($r=.20$, *ns*; partial r controlling for competence $=.25$, *ns*).

Hypotheses 3a and 3b: Salary and Hiring Recommendations

Analyses of participants' recommendations for the starting salary of the candidate revealed a significant main effect of pregnancy condition, $F(1, 77)=4.29$, $p<.05$, and a significant main effect of work condition, $F(1, 77)=4.76$, $p<.05$. These effects were qualified by a marginally significant interaction, $F(1, 77)=3.82$, $p=.06$. Follow-up analyses indicated that pregnant candidates for the masculine position were recommended for a significantly lower starting salary ($M=-.55$, $SD=.74$) than pregnant candidates for a feminine position ($M=.12$, $SD=.86$). Recommendations for the non-pregnant candidate did not differ by work condition (Masculine, $M=.10$, $SD=.79$; Feminine, $M=.14$, $SD=.47$).

The analyses of participants' hiring recommendations revealed a significant main effect of pregnancy $F(1, 78)=10.03$, $p<.01$, with the pregnant candidate less likely to be recommended for hiring ($M=4.13$, $SD=1.16$) than the non-pregnant candidate ($M=4.86$, $SD=.92$). In addition, there was a significant main effect of work condition, $F(1, 77)=4.08$, $p<.05$, with candidates for the masculine-typed position being less likely to be recommended for hiring ($M=4.26$, $SD=1.25$) than candidates for the feminine-typed position ($M=4.73$, $SD=.86$). The interaction between pregnancy condition and work condition was not significant, $F(1, 78)=.05$, $p=.83$.

Discussion

The results of the study are partially consistent with our hypotheses, providing mixed support for the predictions made from a SCM perspective. Pregnant candidates were evaluated as both warmer and more competent than non-pregnant candidates (Hypothesis 1a). Contrary to our second hypothesis and the results of Cuddy et al. (2004), competency was not universally associated with hiring recommendations with a positive association only evident for the non-pregnant candidate. However, consistent with hypothesis 2, warmth was unrelated to hiring recommendations for either candidate. Consistent with hypothesis 3a and the findings of previous research (e.g., Bragger et al. 2002), the pregnant candidate was recommended for a lower starting salary and

was less likely to be recommended for hiring than the non-pregnant candidate. However, contrary to predictions, the effect of pregnancy on trait evaluations and recommendations were generally not accentuated in the masculine- (vs feminine-) type position, although there was some evidence that candidates were evaluated differentially for the two positions (Hypothesis 1b and 3b).

This study adds to a growing body of literature demonstrating that pregnant women are discriminated against in the workplace (e.g., Bragger et al. 2002; Halpert et al. 1993). Whilst Bragger et al. (2002) suggested that reactions to pregnant women in the workplace may be driven by both beliefs about pregnant women and beliefs about the (future) leave taking and work/life balance issues of working mothers, the current study sought to gauge the unique impact of pregnancy-related stereotypes in the workplace. This was done by considering evaluations of a pregnant woman for a short-term position that would end prior to birth. Consistent with previous research (Bragger et al. 2002; Halpert et al. 1993), the results of the current study indicate that pregnancy alone is enough for discrimination in terms of hiring preferences and salary penalties to occur.

Working from a SCM perspective (Fiske et al. 2002), this study also sought to explore why such discrimination against pregnant women in the workplace occurs. Extending on the recent application of the SCM to discrimination against working mothers (Cuddy et al. 2004), it was predicted that pregnancy alone may be sufficient to make the category of 'mother' dominant over other potential workplace categorisations (e.g., professional). It was expected, in line with the predictions of Cuddy et al. (2004), that the pregnant candidate would be evaluated as less competent, but warmer than the non-pregnant candidate. Contrary to this, in the current study pregnant women appeared to gain in both competency and warmth. However, this did not translate to improved hiring and salary prospects for the pregnant candidate.

On face value, the results of the current study appear to be inconsistent with the SCM (Fiske et al. 2002). The pregnant candidate was rated as more competent and warmer than the non-pregnant candidate, a combination under the SCM which should not, theoretically, co-occur with passive discrimination such as a lesser willingness to hire. In their analysis of working mothers, Cuddy et al. (2004) noted that two categorizations of members of that group were possible—specifically, working mothers could either be viewed as primarily business women (competent but cool) or primarily as mothers (incompetent but warm). One possibility is that pregnant women are a group in transition who gain temporarily from the warmth of working mothers, whilst not yet losing the competence associated with business women (Fiske et al. 2002; Cuddy et al. 2004). Alternatively, it is possible that pregnant women do not suffer in terms of

perceived competency in the same way as working mothers as there is nothing (or rather, nobody, in the form of a dependent baby) which prevents them from conforming to the ‘ideal worker’ stereotype (Ridgeway and Correll 2004; cf Pattison et al. 1997).

However, the results of this study suggest that not only are pregnant women in the workplace not devalued in terms of competency, but they actually gain in comparison to a non-pregnant female applicant. Whilst inconsistent with the predictions of the only other study to date to focus on ratings of individual targets using a SCM framework, specifically working mothers (Cuddy et al. 2004), this finding is less at odds with the results obtained in that study. Specifically, Cuddy et al. (2004) note that while the working mother was evaluated as significantly warmer than the childless female worker, the difference in competency evaluations of the two women was less marked. Specifically the working mother was only judged as less competent than the childless female worker at the $p=.08$ level.

One possible explanation for these findings obtained when the SCM framework is applied to evaluations of individual targets (rather than groups as a whole, e.g., Fiske et al. 2002) comes from the shifting standards model of stereotypes (e.g., Biernat and Kobrynowicz 1999; Kobrynowicz and Biernat 1997), in conjunction with contextual features of the studies. According to the shifting standards model, trait ratings of members of certain groups are made with knowledge/beliefs about other members of that group in mind. Thus, the ‘baseline’ expectation for the presence or absence of certain traits differs depending on the cultural stereotypes held about that trait in relation to the specific group. Therefore, comparisons on trait measures are made with this normative expectation in mind. In line with this, Eagly et al. (2000) proposed that in a workplace setting, raters may attribute greater agency to a female employee than a male employee because of the contrast of the agency of the female employee vis-à-vis other women (whereas for the male employee, agency is normative). However, proponents of this model (e.g., Biernat and Kobrynowicz 1999; Kobrynowicz and Biernat 1997) suggest that trait ratings will be inconsistent with more objective measures of attitudes or behavioral inclinations towards members of certain groups. Specifically, they suggest that whilst trait ratings are influenced by within-group comparisons, behavioral judgments are influenced by broader group stereotypes.

In line with this, Kobrynowicz and Biernat (1997) found that whilst perceivers indicated that mothers performed more parenting behaviors than fathers, the parenting effectiveness of mothers and fathers was judged as equal. In addition, and again in line with the shifting standards model, Bridges et al. (2002) found that working mothers were rated lower on communion and parental effectiveness

traits than working fathers but they were (objectively) judged as performing more physical caregiving than employed fathers.

In the context of the current study and the study of Cuddy et al. (2004) study, the behavior of the individual targets to be evaluated may have inadvertently triggered within-, rather than between-, group comparisons. Within Cuddy et al. (2004) the competency of the working mother may have been evaluated in comparison to other mothers. In the current study, the pregnant candidate may have been evaluated in comparison to other pregnant women, rather than in comparison to female employees in general. Given the stereotypical association between pregnancy and perceived illness (Pattison et al. 1997), respondents may have perceived the pregnant candidate who wished to take on the demands of a new role as being far more competent (defined as ambitious and assertive) than the typical pregnant woman. The latter may be viewed as performing adequately if she manages to remain working during her ‘illness’ (Pattison et al. 1997; Gueutal et al. 1995). As such, one possibility is that contextual features of the study, designed to disentangle the impact of pregnancy-related stereotypes and fear of future leave taking on discrimination, may have triggered within-group comparisons with regard to the competency of the pregnant candidate. Thus, the competency rating of the pregnant candidate obtained in the current study could be considered somewhat errant and therefore, in line with the shifting standards model, not predictive of, or related to, hiring recommendations (Cuddy et al. 2004).

Drawing on the suggestion of Bragger et al. (2002) and Ridgeway and Correll (2004), the current study also sought to explore whether the perceived incompatibility of a pregnant women, for whom stereotypical feminine traits may be highly salient, with work would be accentuated in a masculine-typed position in comparison to a feminine-typed position. Consistent with the results of Bragger et al. (2002), but contrary to predictions, the results of this study indicated that bias against pregnant candidates was not generally accentuated in the masculine position. One exception to this finding was in regard to salary recommendation, in which the pregnant candidate was recommended for a lower starting salary when applying for the masculine position in comparison to the feminine position. Bragger et al. (2002) accounted for their results by suggesting that discrimination against pregnant women may be triggered by fear of their future leave taking patterns, rather than by perceived heightened femininity. The results of the current study suggest that this fear may not be a sufficient explanation for the discrimination faced by pregnant candidates. However, the results also do not support Bragger et al.’s (2002) hypothesised relationship

between heightened femininity and discrimination in masculine-typed positions. In the current study this may be accounted for by the fact that, according to the unexpected heightened competency ratings, the pregnant candidate was not viewed as possessing traits that were particularly incompatible with either the feminine position (warmth) or the masculine position (competence). Future research should further explore the relationship between pregnancy and gender-typing of positions by considering through the use of objective measures of warmth and competency first whether, as Bragger et al. (2002) argues pregnant women like working mothers actually do gain in warmth but lose in competency in comparison to other working women. Second, if pregnant women are stereotyped like working mothers as warm but incompetent, whether, in a context where future leave taking is not an issue, discrimination against a pregnant woman who is viewed in these stereotypical terms is accentuated in masculine-typed positions. Finally, research should also attempt to disentangle the complex interrelationship between gender-typing of occupations and the societal status of those occupations. Whilst the SCM suggests that it may be the perceived ‘mismatch’ of stereotypically feminine traits and competencies that provokes discrimination, discrimination may be most evident when the appointment of a (pregnant) woman to a masculine position also provides a threat to the status of men in society (Masser and Abrams 2004).

Although the results of the current study have lent some support to the suggestion from the SCM (Fiske et al. 2002) and the work of Cuddy et al. (2004) that pregnant women may suffer from the same evaluative consequences as working mothers, some limitations and considerations for those wishing to use the SCM framework at an individual target level should be noted. First, in attempting to tease apart the effect of pregnancy from the perceived workplace consequences of becoming a mother (in the form of leave taking patterns), it appears possible from the shifting standards model (e.g., Biernat and Kobrynowicz 1999; Kobrynowicz and Biernat 1997) that the competency ratings of the pregnant candidate may have been bolstered. As such, the pregnant candidate was rated as more competent, warmer and more likely to be discriminated against than the non-pregnant candidate. Whilst such a combination is theoretically inconsistent with the SCM, it is less inconsistent with the pattern of results obtained in the only other (published) study that used the SCM in relation to evaluations of individual targets (Cuddy et al. 2004). As such, it seems that in the context of individual level rather than group level evaluations, and with this type of evaluation tool (traits), participants may make within rather than between group comparisons as predicted by the

shifting standards model (e.g., Biernat and Kobrynowicz 1999; Kobrynowicz and Biernat 1997). To protect against this, a shift in methodology may be required for the SCM framework to be used with individual targets. Specifically, competency and warmth should be evaluated through objective questions rather than subjective trait ratings (Biernat and Kobrynowicz 1999; Kobrynowicz and Biernat 1997). In addition, future research should also consider the role of affect in mediating the link between stereotypes and discriminatory behavior (Cuddy et al. 2007). Theoretically, from a SCM perspective (Fiske et al. 2002; Cuddy et al. 2004) if pregnant women are working mothers to be, then the link between the stereotypes of warmth and competency and discriminatory behavior should be mediated by the emotions proposed to be associated with working mothers in previous research (e.g., pity; Cuddy et al. 2007).

A second possible limitation and consideration concerns the generalisability of our results. The participants were not employers, but rather University students, and as such the data from this study may tell us little about actual discrimination against pregnant women in Australian workplaces. Simply, it is possible that extensive workplace or managerial experience may moderate the observed link between pregnancy and discrimination. However, given the results of previous research examining pregnancy in the workplace (e.g., Halpert et al. 1993) and the number of official complaints of discrimination lodged and upheld by pregnant women against Australian employers, we think that this is unlikely. In short, using employers of the future (e.g., University students) rather than actual current employers as participants in this study may have, if anything, served to underplay the impact of pregnancy-related stereotypes in the workplace on discriminatory outcomes.

Conclusion

The results of the current study have demonstrated, in terms of the SCM (Fiske et al. 2002; Cuddy et al. 2004) that pregnant women are in many ways working mothers (to be). In line with Cuddy et al. (2004) who predicted that working mothers would gain in warmth, lose in competence, and experience passive harm (in the form of discrimination) relative to the childless working women, the results of this study suggest that pregnant women are liked, but not wanted in the workplace. Specifically, when applying for a short-term transfer, pregnant women are rated as warmer and relatively competent, but are less likely to be hired than a non-pregnant candidate. While this study draws on the shifting standards model of stereotypes to suggest some revisions to how the SCM is operationalised at the individual target level, this study serves to add to a body of literature that continues to document the existence

of workplace discrimination against pregnant women (e.g. Bragger et al. 2002; Halpert et al. 1993).

Acknowledgment The research reported in this paper was supported by an Australian Research Council grant (DP0451975) to the first author.

References

- Allport, G. W. (1954). *The nature of prejudice*. Reading, MA: Addison-Wesley.
- Baxter, J. (1992). Domestic labour and income inequality. *Work, Employment, and Society*, 6, 229–249.
- Becker, G. (1985). Human capital, effort, and the sexual division of labor. *Journal of Labor Economics*, 3, S53–S58.
- Becker, G. (1991). *A treatise on the family*. Cambridge: Harvard University Press.
- Biernat, M., & Kobryniewicz, D. (1999). *A shifting standards perspective on the complexity of gender stereotypes and gender stereotyping*. In W. B. Swann Jr., J. H. Langlois, J. H. Gilbert & L. Albino (Eds.), *Sexism and stereotypes in modern society: The gender science of Janet Taylor Spence* (pp. 75–106). Washington, DC, US: American Psychological Association.
- Blau, F. D., & Kahn, L. M. (2000). Gender differences in pay. *Journal of Economic Perspectives*, 14, 75–99.
- Bragger, J. D., Kutcher, E., Morgan, J., & Firth, P. (2002). The effects of the structured interview on reducing biases against pregnant job applicants. *Sex Roles*, 46, 215–226.
- Breusch, T., & Gray, E. (2004). New estimates of mothers' forgone earnings using HILDA data [Paper in: Understanding Labour Market Dynamics in Australia: Using the Household, Income and Labour Dynamics in Australia (HILDA) Survey], *Australian Journal of Labour Economics*, 7, 125–150.
- Bridges, J. S., Etaugh, C., & Barnes-Farrell, J. (2002). Trait judgments of stay-at-home and employed parents: A function of social role and/or shifting standards. *Psychology of Women Quarterly*, 26, 140–150.
- Buttrose, I., & Adams, P. (2005). *Motherguilt: Australian women reveal their true feelings about motherhood*. Australia: Penguin Books.
- Conway, M., Pizzamigli, M. T., & Mount, L. (1996). Status, communal-ity, and agency: Implications for stereotypes of gender and other groups. *Journal of Personality and Social Psychology*, 71, 25–38.
- Crittenden, A. (2001). *The price of motherhood: Why the most important job in the world is still the least valued*. New York: Metropolitan Books.
- Crosby, F. J., Williams, J. C., & Biernat, M. (2004). The maternal wall. *Journal of Social Issues*, 60, 675–682.
- Cuddy, A. J. C., Fiske, S. T., & Glick, P. (2004). When professional become mothers, warmth doesn't cut the ice. *Journal of Social Issues*, 60, 701–718.
- Cuddy, A. J. C., Fiske, S. T., & Glick, P. (2007). The BIAS map: Behaviors from intergroup affect and stereotypes. *Journal of Personality and Social Psychology*, 92, 631–648.
- Deutsch, F. M., & Saxon, S. E. (1998). The double standards of praise and criticism for mothers and fathers. *Psychology of Women Quarterly*, 22, 665–683.
- Drago, R., Scutella, R., & Varner, A. (2001). *Work and family directions in the U.S. and Australia: A policy research agenda. Report for the Department of Family and Community Services*. University of Melbourne, Melbourne Institute of Applied Economic and Social Research.
- Eagly, A. H., Wood, W., & Diekmann, A. B. (2000). Social role theory of sex differences and similarities: A current appraisal. In T. Eckes & H. M. Trautner (Eds.), *The developmental psychology of gender* (pp. 123–173). Mahwah, NJ: Erlbaum.
- Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, 82, 878–902.
- Fuegen, K., Biernat, M., Haines, E., & Deaux, K. (2004). Mothers and fathers in the workplace: How gender and parental status influence judgments of job-related competence. *Journal of Social Issues*, 60, 737–754.
- Gueutal, H. G., Luciano, J., & Michaels, C. A. (1995). Pregnancy in the workplace: Does pregnancy affect performance appraisal ratings. *Journal of Business and Psychology*, 10, 155–167.
- Gueutal, H. G., & Taylor, E. M. (1991). Employee pregnancy: The impact on organizations, pregnant employees, and co-workers. *Journal of Business and Psychology*, 5, 459–475.
- Halpert, J. A., Wilson, M. L., & Hickman, J. L. (1993). Pregnancy as a source of bias in performance appraisals. *Journal of Organizational Behavior*, 14, 649–663.
- Harkness, S., & Waldfogel, J. (1999). *The family gap in pay: Evidence from seven industrialised countries (Discussion Paper)*. Centre for Analysis of Social Exclusion.
- Houston, D. M., & Marks, G. (2003). The role of planning and workplace support in returning to work after maternity leave. *British Journal of Industrial Relations*, 41, 197–214.
- Human Rights and Equal Opportunities Commission (2007). *It's About Time Women, men, work and family. Final Paper 2007*. Sydney, Australia: Sex and Age Discrimination Unit.
- Judd, C. M., James-Hawkins, L., Yzerbyt, V., & Kashima, Y. (2005). Fundamental dimensions of social judgment: Understanding the relations between judgments of competence and warmth. *Journal of Personality and Social Psychology*, 89, 899–913.
- Kobryniewicz, D., & Biernat, M. (1997). Decoding subjective evaluations: How stereotypes provide shifting standards. *Journal of Experimental Social Psychology*, 33, 579–601.
- Korenman, S., & Neumark, D. (1992). Marriage, motherhood and wages. *Journal of Human Resources*, 27, 233–255.
- Masser, B. M., & Abrams, D. (2004). Reinforcing the glass ceiling: The consequences of hostile sexism for female managerial candidates. *Sex Roles*, 51, 609–615.
- Pattison, H., Gross, H., & Cast, C. (1997). Pregnancy and employment: The perceptions and beliefs of fellow workers. *Journal of Reproductive and Infant Psychology*, 15, 303–313.
- Ridgeway, C. L., & Correll, S. J. (2004). Motherhood as a status characteristic. *Journal of Social Issues*, 60, 683–700.
- Six, B., & Eckes, T. (1991). A closer look at the complex structure of gender stereotypes. *Sex Roles*, 24, 57–71.
- Waldfogel, J. (1997). The wage effects of children. *American Sociological Review*, 62, 209–217.
- Waldfogel, J. (1998). Understanding the 'family pay' in pay for women with children. *The Journal of Economic Perspectives*, 12, 137–156.
- Whitehouse, G. (2004, July). *Parental employment and policy frameworks: Aspects of Australian exceptionalism*. Paper presented at the 25th Annual Conference of the International Working Party on Labour Market Segmentation, Brisbane, Australia.